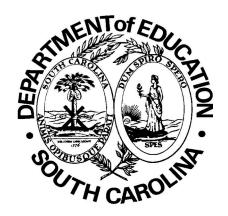
# SOUTH CAROLINA MATHEMATICS AND SCIENCE COACHING INITIATIVE 2007–08

# DISTRICT-SUPPORTED MATHEMATICS OR SCIENCE COACH APPLICATION PACKET



Mathematics and Science Unit Office of Curriculum and Standards South Carolina Department of Education



#### DISTRICT-SUPPORTED COACH APPLICATION PACKET 2007–08

SECTION I: DI	STRICT & SCHOOL INFORMATION		
Check the content area coach position for which you are applying:			
	Mathematics Science		
Coach			
nominee:			
District:			
School where			
coach will be			
assigned:			
School			
address:			
Principal:	Telephone:		
1			
E-mail:			
District office	Telephone:		
contact:			
E-mail:			

#### Selection of a District-Supported Mathematics or Science Coach

The district's selection process for a District-Supported Mathematics or Science Coach should be rigorous and fair. It should ensure that the person serving in this role has credibility with the teachers and the school principal. The personal qualities of a mathematics or science coach help to establish trust. Professional experience in mathematics and science teaching and in teaching mathematics and science helps the coach demonstrate their value to their colleagues.

The enclosed application rubric shows the criteria that will be used by the MSU to select a person to be prepared as a MSU School-Based Mathematics or Science Coach. The MSU encourages districts to use this instrument or some similar type of criteria to select a candidate for the position of a District-Supported Mathematics or Science Coach.

### SECTION II: DISTRICT-SUPPORTED MATHEMATICS OR SCIENCE COACH MEMORANDUM OF AGREEMENT (MOA)

#### MOA Among the

#### South Carolina Department of Education and

the Mathematics or Science Coach, the Schools, and the School District Named Herein

#### I. Background

The South Carolina State Department of Education (SDE) has developed a program under S.C. Code Ann. § 59-1-525 to implement a school-wide program to enhance the teaching of the grade-specific standards adopted by the State Board of Education and to improve the teaching of the standards in the core areas of reading, mathematics, social studies, and science. In order to support these goals, the Mathematics and Science Unit (MSU) has developed a process for the identification, selection, and training of mathematics or science coaches to serve in schools with grades K–5.

The goal of the program for District-Supported Mathematics or Science Coaches is to provide professional development for the mathematics or science coach, the building principal, and a district administrator in order to effectively implement a mathematics or science coaching program in a single school. The training will prepare the coach to work directly with teachers to bring about improvement in classroom practices to positively impact student achievement. It will prepare the building principal to provide school-based administrative support for the program, and it will present the district administrator with additional strategies for providing support to the mathematics or science coach during the school year.

The training as well as the work of the District-Supported Mathematics or Science Coach will be consistent with the MSU Theory of Action for Instructional Improvement.\* Our experience has shown the positive impact that a full-time mathematics or science coach can have on improving instruction by working with teachers in a single school. Improving the mathematics or science instruction in the school ultimately leads to improved student learning in mathematics or science.

- A. The work of the District-Supported Mathematics or Science Coach will be based on scientifically based research, content knowledge, and appropriate mathematics or science curriculum
- B. The work of the District-Supported Mathematics or Science Coach will be consistent with the common vision to improve student knowledge and understanding of mathematics or science.
- C. The work of the District-Supported Mathematics or Science Coach will help develop the state, district, school, and classroom infrastructure by attending to each of the following elements of the MSU Theory of Action for Instructional Improvement:
  - research-based curriculum,
  - competent teachers,
  - assessment,
  - instructional materials support, and
  - engaged school and community.

<sup>\*</sup>Adapted from the National Science Resource Center of the Smithsonian Institute/National Academies

#### II. Participating Parties in the Agreement

The following person will participate in this program with the title of District-Supported Mathematics or Science Coach:

Name:
The following school and district will participate in this program (please type or print):
School:
District:
District Address:

The MSU will accept, at most, a total of thirty (30) District-Supported Mathematics or Science Coaches—fifteen (15) District-Supported Mathematics Coaches and fifteen (15) District-Supported Science Coaches—for the summer of 2006 training. This program is a pilot for future trainings, and, as such, the criteria for selecting participating districts include geographic location, evidence of need, and the presence of similar programs currently in place in the district.

#### III. Roles and Responsibilities of the District-Supported Mathematics or Science Coach

The work of the District-Supported Mathematics or Science Coach is to develop the instructional capacity of a school faculty. The coach will assist teachers to use effective instructional strategies. The mathematics or science coach will

- work with teachers to plan, implement, and reflect upon lessons;
- work with content-area teachers to hone specific strategies;
- observe classes and engage teachers in reflection;
- identify standards-based materials and other curriculum resources;
- encourage teachers to talk about their practices;
- facilitate co-teaching and demonstration lessons; and
- employ other emerging strategies from research and best practices.

The work of the mathematics or science coach will be consistent with the MSU Theory of Action for Instructional Improvement.

#### IV. Collaboration

The coaching initiative will work most effectively as a partnership that includes the school, the district, and the Mathematics and Science Unit. Successful coaching depends on effective collaboration, specifically:

- A. The District-Supported Mathematics or Science Coach will
- Perform work consistent with MSU Theory of Action for Instructional Improvement. (Work <u>inconsistent</u> with the MSU Theory of Action for Instructional Improvement includes the coach serving as an additional teacher, a designated substitute, a supervisor, or a coordinator for a mathematics or science program. *Please see attached Guide document for a specific listing of the inappropriate uses of the coach.*)
- Attend all MSU scheduled meetings, including two, week-long training institutes, and eight MSU statewide follow-up meetings throughout the school year.
- Complete and submit all assignments and updates in a timely manner.
- Assist in the implementation of all MSU directives.

#### B. The school will

- Engage the District-Supported Mathematics or Science Coach in a manner consistent with his or her roles and responsibilities as determined by the MSU. (Please see attached Guide Document (Appendix A) for a detailed list of appropriate and inappropriate uses of the coach.)
- Ensure that the principal and the District-Supported Mathematics or Science Coach attend the obligatory training dates, and that the coach attend the second week-long training.
- Ensure that the principal attend the follow-up meetings (two) for principals and district office contacts.
- Provide the space and resources necessary for the mathematics or science coach to function effectively in his or her position.
- Provide the District-Supported Mathematics or Science Coach with *adequate* opportunities for embedded professional development.

#### C. The district contact will

- Agree to attend the obligatory training dates, and that the coach attend the second week-long training. (i.e., The district person must agree to be a full participant during the requested time/days for both weeks.)
- Agree to serve as the support person for the coach. (Note: The MSU will serve as the support person(s) for the MSU school-based coach.)
- Attend each of the two administrator follow-up sessions.
- Work with the MSU to ensure effective use of the services of the mathematics or science coach. (Please see attached Guide Document (Appendix A) for a detailed list of appropriate and inappropriate uses of the coach.)
- Ensure that the principal and the District-Supported Mathematics or Science Coach attend the obligatory training dates.
- Ensure that the principal attend the follow-up meetings (two) for principals and district office contacts.

- D. The MSU will
- Provide the training, leadership, and coordination needed for the mathematics or science District-Supported Mathematics or Science Coach to develop the instructional capacity of the school faculty;
- Provide the training needed for the building principal to better support the coaching program in one school;
- Provide the training needed for the district administrator to offer ongoing support to the coach during the school year; and
- Work with the district, the school, and the District-Supported Mathematics or Science Coach to develop, implement, and revise as needed a school plan for instructional improvement in mathematics or science.

Preparation for the District-Supported Mathematics or Science Coaches was designed to reflect the South Carolina Professional Development Standards. These standards emphasize not only the significance of high-quality training programs but also the importance of intensive and focused follow-up sessions. The coaching program is part of a systemic change process. For the coaching program to succeed in a school, ongoing follow-up support is essential. The MSU reserves the right to withdraw assistance if it is determined that the school or district is not engaging the coach in a manner consistent with roles and responsibilities as outlined in this Memorandum of Agreement.

#### V. Financial Obligations

For the 2007–08 school year,

- The district and/or school will pay the MSU the sum of \$12,500\*\* for the District-Supported Mathematics or Science Coach team's participation in week one of the Mathematics and Science Coaching Initiative (MSCI 1), week two of the Mathematics and Science Coaching Initiative (MSCI 2), and monthly follow-up meetings. (Note: A team consists of the District-Supported Mathematics or Science Coach, a building principal, and a district contact person.)
- The district and/or school will provide support for transportation expenses (mileage)
  associated with the participation of District-Supported Mathematics or Science Coach,
  principal, and/or district personnel to attend all institutes and meetings.
- Districts with more than one team will pay the MSU the sum of \$10,500 for each additional team of coach and principal.
- Districts who send an additional team (i.e., two full teams of coach, principal, and district personnel) will pay the MSU \$12,500.
- It is the district's responsibility to provide mileage reimbursements.

Districts may use K-5 Enhancement, PDSI, Title I, Title II Part A, or other funds available to the district to support the coach's salary and/or training costs. The MSU will provide training and support as long as the school continues to abide by the terms of this MOA.

- \*\*The \$12,500 year-long training and follow-up fee includes expenses incurred for
- Lodging during the first week of training (MSCI 1) and for one night of lodging during the second week of training (MSCI 2) for the principal and district contact persons,
- Lodging during the first and second week, of training (MSCI 1 & 2) for the District-Supported Mathematics or Science Coach, and

• Lodging and materials for the district-supported mathematics or science coach during the eight follow-up sessions during 2007–08.

#### VI. Amendments

This memorandum constitutes the whole agreement between the parties, and no prior representatives, negotiation, or agreements by any party shall affect the construction and operation of this agreement. Only a written instrument signed by all parties may amend this agreement.

The following individuals, as the parties or the representatives of the parties named in this memorandum, agree to all stipulations as set forth herein:

#### DISTRICT-SUPPORTED MATHEMATICS OR SCIENCE COACH

Name (please type or print)	Signature
	SCHOOL PRINCIPAL
Name (please type or print)	 Signature
u 21 1 /	
Date	
DIST	RICT SUPERINTENDENT
Name (please type or print)	Signature
Date INEZ M. TENENBAUM.	STATE SUPERINTENDENT OF EDUCATION
mile in Terrenti,	
Signature	Date

#### Application Deadline: Friday, December 8, 2006 Must be received in SDE Office by 5:00 p.m.

Return District-Supported Coach application packet and the Memorandum of Agreement to
Dr. John Holton
South Carolina Department of Education
1429 Senate Street, Room 801-B
Columbia, South Carolina 29201

# GUIDELINES FOR THE WORK OF A MATHEMATICS OR SCIENCE COACH

- 1. The purpose of the coach is to help raise student achievement by empowering other teachers. Activities that promote this end should be encouraged; activities that do not should be avoided at all costs.
- 2. If the teachers in your school have rotating duties such as bus, lunch, or hall duty, the coach can certainly volunteer to share those duties so long as they do not interfere with the ultimate goal. However, please remember that the coach's <u>teaching position</u> in the school is filled by an additional faculty member hired as a replacement. The coach's position does not, therefore, increase the duty assignments on other teachers.
- 3. The coach is *not* to be used as a substitute teacher in the school.
- 4. Coaches can <u>occasionally</u> teach classes if the goal is to promote good teaching practices, for example, co-teaching classes with teacher colleagues. Coaches should not be assigned regular teaching duties during the school day because it is almost impossible to teach "part time."
- 5. Coaches must be available to participate with their colleagues during planning sessions, team meetings, and other professional development opportunities. Coaches must have time during the school day for professional reading, reflective journaling, and other MSU assignments.
- 6. Coaches are assigned to a specific school and should spend their time working with the teachers in the assigned school. Coaches are not to be assigned district responsibilities.
- 7. The coach is <u>not</u> to be used to train coaches for other schools. The MSU coaching initiative is not designed as a train-the-trainer program.
- 8. Coaches are not to do formal observations (such as ADEPT, etc) of teachers for school or district evaluations or to collect data for teacher evaluations.
- 9. Coaches are obligated to attend *all* scheduled MSU meetings. The eight follow-up sessions and two regional meetings are part of the coach's job. Requests for exceptions need to be raised with the coach's MSU specialist-mentor.
- 10. A record of absences should be kept and approved in accordance with school and district policies, and, in addition, the regional coordinator should be notified of any absences.

#### SUPPORTING EFFECTIVE COACHING 2007–08 SCHOOL YEAR

#### Goals:

- Continue to provide coaches with the skills they need to work effectively with the teachers in their schools
- Continue to provide content needed to effectively coach teachers in implementing the K-5 mathematics or science standards
- Continue to develop the sense of collegiality among coaches and MSU staff and work to build a learning community
- Continue to develop and utilize administrative support for the coaching initiative at the school and district level
- Support the implementation of the plan of action developed during MSCI 1 and 2

In order to achieve these goals, it is vital that continuing and substantial contact be maintained among the MSU staff and the coaches, the principals, and the district contacts. The follow-up training will foster the coaches' connections to the MSU and to their peers. The follow-up training will provide a support system for addressing concerns/problems and a mechanism for sharing successes.

#### **Key Elements:**

- Communication
  - 1) Electronic: e-mail, bulletin boards, electronic journal entries
  - 2) Monthly meetings at the school with the coach, principal, district contact, specialist and regional coordinator
- Training
  - Eight (8) monthly meetings in Columbia to provide approximately 80 hours of professional development in content and coaching skills. Dates are to be determined. Meals and lodging are covered by MSU; mileage is the responsibility of the district.
  - 1) There will be two **regional follow-up sessions** for coaches. These dates are to be determined.
- Principal Follow-up
  - 1) Two sessions will be held in Columbia. Fall and spring dates to be will determined. Mileage is the responsibility of the district.
  - 2) One-day sessions focus on building administrative support.
  - 3) These sessions provide information to guide modifications to the coaching program and to plan for summer two and year two for this cohort.

## MSU COHORT V SCHOOL-BASED MATHEMATICS OR SCIENCE COACH RUBRIC

The following guidelines were designed to help districts assess all MSU Cohort V School-Based Mathematics or Science Coach applications.

#### I. Rating the District's or School's Narrative

- A. Providing Time for Teacher Support (weight X2)
  - The narrative clearly explains how common planning time is, or will be, provided daily during the school day. (2 points)
  - The narrative clearly explains how common planning time is, or will be, provided daily not during the school day. (1 point)
- B. The Impact of Other Programs
  - The narrative clearly describes other programs that have been used (or support personnel hired) within the past five years, and their impact on the school, and the relationship between each program. (2 points)
  - The narrative of the relationship between the programs and the impact is vague. (1 point)
- C. School Coaching Needs and Expected Outcomes (weight X2)
  - The narrative includes clearly identified needs based upon an analysis of relevant data and articulates ways in which a science coach could address those needs. (2 points)
  - A statement of needs was submitted, but little or no relationship is shown between the needs and an analysis of the data. (1 point)
- D. Continuation of a Full-Time Coaching Program (weight X2)
  - The narrative clearly describes a meaningful plan (and specific strategies) the district will use to ensure continued high-quality implementation of the coaching initiative (e.g., use of PDSI funds, Title I, Title II, NCLB funds). (2 points)
  - A plan was identified, but it is not feasible or practical. (1 point)
- E. Comprehensive School Change
  - The narrative includes a clear description of the connections among various programs during the past five years, the relationship between these programs, and the overall school improvement plan. (2 points)
  - The narrative includes either a description of the connections among various programs or the relationship between the programs and the overall school improvement plan, but not both. (1 point)
- F. Special Circumstances
  - Narrative contains a compelling description of special circumstances. (3 points)
  - Narrative contains a good description of special circumstances. (2 points)
  - Narrative contains a vague description of special circumstances. (1 point)

# II. Rating the MSU Cohort V School-Based Mathematics or Science Coach Application

Applicant's Professional Preparation

- Application includes evidence of South Carolina certification (certificate enclosed) and a master's degree in an appropriate field. (2 points)
- Applicant is certified and has a bachelor's degree. (1 point)

#### Applicant's Work Experience

- Applicant has rich and varied professional work experience appropriate to the K-5 mathematics or science position for which they have applied. The teacher may have been a lead teacher or department chair, may have written curricula, may have been a mentor, may have been a SIP facilitator, may have taught many grade levels or subjects with at least 3 years teaching one specific grade/subject, and/or may have extensive experience with additional leadership duties such as school planning. Stated reasons for leaving previous jobs are acceptable. (3 points)
- Applicant has good professional experiences. Teacher has one or two experiences beyond classroom assignment(s). (2 points)
- Applicant has minimal professional experiences. (1 point)

#### Letters of References/Support

- Three letters of reference contain information beyond the requirements of professional preparation (A) and work experience (B) in this section. One letter, from the applicant's current immediate supervisor, addresses the exceptional qualities and teaching abilities of the applicant and directly relates to the position for which the applicant is applying. (3 points)
- <u>Two</u> references contain information beyond that listed in A and B in this section. (2 points)
- One reference contains information beyond that listed in A and B in this section. (1 point)

#### III. Rating the Personal Narrative

- G. Background Experience (weight X2)
  - The narrative includes dates and evidence of participation in professional workshops, institutes, courses, or other opportunities specific to mathematics or science education. Participation in the courses should enable the applicant to help elementary teachers raise their students' level of performance. Evidence of that ability includes how involvement in each professional development opportunity has influenced the applicant's own teaching. (3 points)
  - The narrative includes names and descriptions of recent courses/workshops, ways the workshops/courses influenced his or her teaching methodology, and how this translated into increased student achievement. (2 points)
  - The narrative lists workshops/courses but fails to adequately convey relationship between the workshop/course, how the course influenced teaching methodology, and student achievement. (1 point)

#### H. Experience Working with Adult Learners (weight X2)

- The narrative includes a description of knowledge of research-based instructional improvement strategies to assist teachers to improve student learning of mathematics/science in the school. Activities address curriculum, instruction, and assessment. The narrative describes <u>ongoing</u> professional development activities that <u>clearly link</u> changing teacher behaviors to student achievement. (3 points)
- The narrative describes <u>ongoing</u> professional development activities that <u>may link</u> changing teacher behaviors to student achievement. (2 points)
- The narrative describes professional development activities that link changing teacher behaviors to student achievement. (1 point)

#### I. Teaching Science or Mathematics (weight X2)

- The narrative includes evidence that the applicant understands the state standards in mathematics or science and has <u>extensive</u> content and pedagogical knowledge to ensure a high level of student interest and student achievement. (3 points)
- The narrative includes evidence that the applicant understands the state standards in mathematics or science and has <u>moderate</u> content and pedagogical knowledge to ensure a high level of student interest and student achievement. (2 points)
- The narrative includes evidence that the applicant understands the state standards in mathematics or science and has <u>minimal</u> content and pedagogical knowledge to ensure a high level of student interest and student achievement. (1 point)

#### J. Working as a Mathematics or Science Coach (weight X2)

- The narrative includes evidence that the applicant has experience in planning, developing, and delivering activities at the building, local, or state level that will affect mathematics or science teaching and student learning. It includes a description of working with teachers on the following three components: curriculum, instruction, and assessment. The narrative includes evidence that the applicant has an extensive understanding of coaching processes and includes a description of a coaching activity that would have the greatest impact on student learning. (3 points)
- The narrative includes evidence that the applicant has a <u>moderate</u> understanding of coaching processes <u>and</u> includes a description of a coaching activity that would have the greatest impact on student learning. (2 points)
- The narrative includes evidence that the applicant has a <u>minimal</u> understanding of coaching processes <u>or</u> includes a description of a coaching activity that would have the greatest impact on student learning. (1 point)